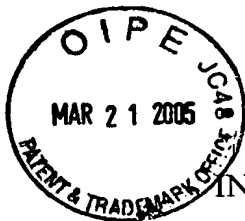


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Docket No.: KCC-15,750

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Michael John NIEMEYER, et al.

Serial No.: 10/025,214

Filing Date: 18 December 2001

Title: WRAPPED ABSORBENT STRUCTURE

Customer No. 35844

Confirmation No. 4970

Group No. 1771

Examiner: E. Cole

**REQUEST FOR RECONSIDERATION**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Dear Sir:

Applicants respectfully request reconsideration and withdrawal of the final rejection of Claims 1-6, 8-25, 27-40 and 42-48 under 35 U.S.C. §103(a).

I hereby certify that this correspondence (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on

16 March 2005

16 March 2005

Date

Michael J. Peterson

Signature

**a) The Rejection Based On Putzier In View  
Of GB 1,231,648 Is Not Tenable**

The Examiner rejected Claims 1, 3-6, 8, 10-11, 16, 19-21, 23-25, 27, 29 and 30 under 35 U.S.C. §103(a) as obvious over U.S. Patent 5,262,218 (Putzier) in view of GB 1,231,648 (Celanese Corp.). This rejection is respectfully traversed.

Independent Claims 1, 16 and 35 require an absorbent structure including an absorbent core and an absorbent wrap. The absorbent wrap must include at least 5% by weight of a binder material mixed throughout a fibrous absorbent material and must provide at least 20% of a total absorbent capacity of the absorbent structure (Claims 1 and 35) or an absorbent wrap to inner core absorbency ratio of at least 0.2 (Claim 16). In other words, the absorbent wrap must possess functional absorbent properties, and must significantly contribute to the overall absorbency of the absorbent structure.

Claims 1, 16 and 35 further require that the absorbent wrap fully surrounds the absorbent core and at least partially overlaps itself.

Putzier discloses an absorbent structure including a wrapper (1) made of a formed fabric of organic polymer material, an intermediate tissue layer of an organic polymer, an absorbing body composed of chemical pulp and an absorbent, and a binder stabilizing the wrapper (Abstract). As shown in Fig. 2, the wrapper (1) is the only layer which may surround the absorbent core and overlap itself, as is required of the absorbent wrap recited in Applicants' claims.

Putzier further discloses that the absorbent body accounts for 80-90% by weight of the absorbent material in the entire structure (Col. 3, lines 53-55). The absorbent body includes chemical pulp ("fluff") and a material having higher absorbency, in a weight ratio of 9:1 to 14:1 (Col. 3, lines 55-58). The material having higher absorbency may be a superabsorbent material (Col. 4, lines 14-44).

The intermediate tissue layer is suitably formed of cellulose or modified cellulose (i.e., “fluff”) and accounts for 3-6% by weight of the absorbent structure (Col. 5, lines 51-59). This material has some absorbent properties. However, the disclosed intermediate layer does not surround the absorbent core, and does not overlap itself (Fig. 2). Thus, the intermediate layer would not constitute an absorbent wrap, as recited in Applicants’ claims.

The disclosed wrapper is made of a nonwoven material of plant origin, such as cotton or rayon, and constitutes 5-8% by weight of the absorbent structure (Col. 4, line 59 – Col. 5, line 10). The wrapper material does not possess significant absorbent properties. To the contrary, the wrapper is intended to be:

arranged in such a way that the absorbent material is completely enclosed. By means of a suitable binder this structure is stabilized in such a way that the material of the absorbing body, i.e., the fluff (cellulose) and/or the absorbent for aqueous liquids, cannot escape. (Col. 5, lines 11-17).

In summary, the wrapper disclosed in Putzier constitutes, at most, 8% by weight of the absorbent structure. Even if the wrapper were formed of the same material as the intermediate layer and the absorbent core, the wrapper would account for not more than 8% of the absorbency of the entire structure.

However, the reference discloses that the wrapper (made of cotton or rayon) is not made of the same material as the intermediate layer (made of cellulose fluff), or the absorbent core (made of a mixture of cellulose fluff and a more absorbent material). The absorbent core layer, which constitutes 80-90% by weight of the structure, is made of the highest absorbing material combination. The intermediate layer, which constitutes 3-6% by weight of the structure, is made of the

second highest absorbing material. The wrapper, which constitutes 5-8% by weight of the structure, is made of the least absorbing material.

Accordingly, the disclosed wrapper would account for substantially less than 8% of the absorbency of the entire structure, or substantially less than half of the minimum required by Claims 1, 16 and 35.

The Examiner attempts to explain these substantial differences by alleging that “it would have been obvious . . . at the time the invention was made to have selected the thickness and relative proportions of the components in order to arrive at a material having the desired absorbency through the process of routine experimentation” (8/10/04 Office Action, p. 3). However, the fact that the invention may have been within the capabilities of persons skilled in the art is not sufficient to establish *prima-facie* obviousness. MPEP 2143.01; Ex Parte Levengood, 28 USPQ2d 1300 (P.T.O.B.A. 1993); In Re Kotzab, 217 F.3d 1365, 55 USPQ2d 1300 (Fed.Cir. 2000).

The Examiner must point to a motivation for persons skilled in the art to design a wrapper layer having substantially greater absorbency relative to the entire structure, than what the prior art discloses. The Putzier reference provides no such motivation. Instead, the Putzier reference focuses on the use of biodegradable wrapper materials, without regard to their absorbency.

The secondary reference to Celanese Corp. (GB 1,231,648) is cited for the use of a binder, and does not overcome the deficiencies in the Putzier disclosure. The Celanese Corp. reference does not disclose a wrapper having the relative levels of absorbency recited in Claims 1, 16 and 35, and does not motivate persons skilled in the art to achieve such absorbency in a wrapper. The combined references do not disclose or suggest Applicants’ invention.

**b) The Rejection Based On Everett In View  
Of GB 1,231,648 Is Not Tenable**

The Examiner rejected Claims 1-14 and 16-33 under 35 U.S.C. §103(a) as obvious over International Publication WO 99/17695 (Everett et al.) in view of GB 1,231,648 (Celanese Corp.). This rejection is respectfully traversed.

Independent Claims 1, 16 and 35 require an absorbent structure including an absorbent core and an absorbent wrap. The absorbent wrap must include at least 5% by weight of a binder material mixed throughout a fibrous absorbent material and must provide at least 20% of a total absorbent capacity of the absorbent structure (Claims 1 and 35) or an absorbent wrap to inner core absorbency ratio of at least 0.2 (Claim 16).

Everett et al. discloses an absorbent article including an absorbent core having multiple absorbent layers (Abstract). The absorbent core includes superabsorbent material in varying concentrations, different layers (p. 6, line 27 – p. 7, line 8). The balance of the absorbent core is typically composed of wood pulp fibers, alone or in combination with other hydrophilic fibers (p. 20, line 27 – p. 21, line 24). The combination of hydrophilic fibers and superabsorbent has a basis weight of about 400-900 gsm (p. 23, lines 5-9).

The absorbent core may be covered by a wrap sheet 28 (See Figs. 1A and 1B). While no basis weight is provided for the wrap sheet, it is apparent from the drawings that the wrap sheet is very thin relative to the absorbent core layers. The wrap sheet 28 may be composed of an absorbent material, such as a tissue of hardwood and softwood fibers (p. 24, lines 9-13). However, the wrap sheet does not contain any superabsorbent material. Instead, the purpose of the wrap sheet is to confine the superabsorbent material in the absorbent core (p. 23, lines 26-30).

Based on the relative thinness of the wrap sheet, the relative thickness of the absorbent core, the absence of superabsorbent in the wrap sheet and the presence of superabsorbent in the core, one can safely conclude that Everett et al. does not disclose or suggest an absorbent structure wherein an absorbent wrapper contributes at least 20% of an overall absorbent capacity as required by Claims 1 and 35, or provides an absorbent wrap to inner core absorbency ratio of at least 0.2, as required by Claim 16. To assume the contrary would require a level of speculation extending far beyond the disclosure of this reference. Furthermore, Everett et al. provides no motivation to make an absorbent structure having a wrapper which meets these limitations. To the contrary, Everett et al. teaches that it is desirable to minimize the thickness of the overall absorbent structure (p. 12, line 27 – p. 13, line 17). This can best be accomplished by adjusting the superabsorbent concentration in the core layer to provide increased absorbency, not by increasing the thickness of the less absorbent wrapper material.

The secondary reference to Celanese Corp. is cited for the use of a binder, and does not overcome the gaps in the Everett et al. disclosure. The Celanese Corp. reference does not disclose a wrapper having the relative levels of absorbency recited in Claims 1, 16 and 35, and does not motivate persons skilled in the art to achieve such absorbency in a wrapper. The combined references do not disclose or suggest Applicants' invention.

**c) The Rejection Of Claims 15 And 34-48  
Over Three References Is Not Tenable**

The Examiner rejected Claims 15 and 34-48 under 35 U.S.C. §103(a) as obvious over Everett et al. in view of Celanese Corp. and U.S. Patent 6,009,558 (Rosch et al.) is respectfully traversed. The differences between independent

Claims 1, 16 and 35 and the combination of Everett et al. and Celanese Corp. have been fully explained above, and need not be repeated.

Rosch et al. is cited as disclosing swimwear. Rosch et al. does not disclose a wrapper having the relative levels of absorbency recited in Claims 1, 16 and 35, and does not motivate persons skilled in the art to achieve such absorbency in a wrapper. The combined references do not disclose or suggest Applicants' invention.

**d) Conclusion**

Applicants submit that the claims, as presented, are in condition for allowance. Reconsideration and withdrawal of the obviousness rejections are respectfully requested.

Respectfully submitted,



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